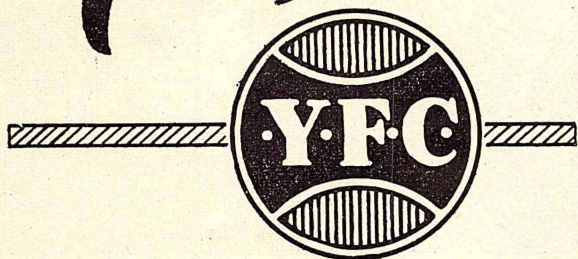


THE NEW ZEALAND

# Young Farmer



Published by  
The Department of Agriculture

for

THE NEW ZEALAND FEDERATION  
OF YOUNG FARMERS' CLUBS (Inc.)

Box 2298, Wellington

## CONTENTS

Vol. 6, No. 5      15 February 1955

W. Regnault's Article on the Kauri	66
Dairying with Buffaloes in Pakistan	68
J. R. Styles's Article on the Edendale Lactose Factory -	69
I.F.Y.E. Selections -	70
Short Courses at Canterbury and Massey Agricultural Colleges -	71
Waimarama Club Member Works Passage to London -	72

Central Otago Leadership Confer- ence -	73
FAO's Diverse Study of World Food Problems -	74
The Origin of the Southdown Sheep -	76
Club Meetings -	78
District Committee Minutes -	79
Short Course Application Forms -	80

*Registered at the G.P.O., Wellington, as  
a magazine.*

## DAIRYING WITH BUFFALOES

Dairying with buffaloes in Pakistan is described in an article on page 68 of this issue by Mr. J. F. Till, Instructor in Agriculture, Department of Agriculture, Auckland, who spent a period in that country last year under the Colombo Plan to advise the Pakistan Government on dairy farming. The buffaloes like to remain in a wallow for 2 or 3 hours daily to overcome the effects of excessive heat.







Centuries Ago these Forest Giants Were Tiny Saplings

## The Magnificent Kauri of the North

WHEN the white man first came to New Zealand he found much of the country clothed in heavy forest. The Northland and Coromandel Peninsulas were no exceptions, but their forests included *Agathis australis*, the kauri, New Zealand's biggest tree. Because of its strength, straight grain, and extreme durability it was quickly realised how valuable the kauri was, both as sawn timber and as spars for sailing ships, and so a major industry grew up, which steadily increased through the second half of the 19th century and reached its zenith in the first quarter of the 20th century. Timber was exported in sailing ships and later in small steamers from all the harbours of the north.

TO be able to tackle a kauri forest a bushman needed not only the normal skill and knowledge of his calling but also tremendous resource and tenacity to get the logs out of the bush. In reasonably easy country bullock teams were used, which required wide tracks with large clearings on the bends so that a team could wheel. Bullock transport was considered to be an easy method compared with manhandling the logs to a stream, building a dam above them, and collapsing the dam so that the surge of water would carry the logs downstream until the force was dissipated. The building of dams would be continued in this way until the logs floated or they reached their destination.

One enterprising bushman in the Henderson Valley, near Auckland, is recorded as having built a wooden tramline several miles long with some down grades of 45 degrees. The trolleys of logs were pulled by horses and let down the steep grades by hand winches.

When it is considered that logs 6ft., 7ft., or 8ft. in diameter were common and that shifting such logs would constitute a major problem today, in spite of our technical progress with track-laying tractors, winches, etc., it will be readily realised just how great the achievements of the early bushmen were.

Though the timber trade rapidly opened up land for farming, it did not keep pace with the demand for farm land, and much kauri and other valu-

able timber was destroyed by the clearing methods adopted. The most common practice was to fell the small trees and undergrowth, which when dry was burnt off, leaving a good seed-bed of ashes for grassing down. This practice, however, killed all the larger trees and left them standing. In many parts of the north the gaunt skeletons may still be seen, a silent reminder of paste waste. In recent

### Runner-up in "Young Farmer" Article Competition

THIS article by W. Regnault, Wellsford Club (Rodney), was placed second in the "Young Farmer" article competition. Other entries will be published in future issues of the "Young Farmer". The subject for the 1955 competition will be announced after the March meeting of the Dominion Executive Committee.

years some of these trees have been felled and milled and have produced excellent timber, in spite of the fact that they have been dead for 50 to 60 years.

### Its Downfall

Thus the proud kauri, mainly through its own outstanding qualities, has brought about its own downfall, for today only a tiny fraction of those

great forests remains. Though a few trees are still milled for building or boat construction, the sight of standing kauri must remain to the cabinet maker, carpenter, and boat builder a mere dream of their ideal timber, to the old time bushman a nostalgic symbol of the romantic past, and to the tree lover something to be cherished and propagated anew.

### Its Hope

Of the few areas of kauri forest remaining the most notable is the Waipoua State Forest on the west coast about 30 miles north of Dargaville. Here in a sanctuary area of 22,000 acres, protected in the past by the difficult terrain and its isolation from harbours and protected today by law, the kauri may be seen in its primeval state, flourishing as it did in centuries past. Here may be seen the well-known and much photographed "Tane Mahuta", which is 40ft. in girth and 43ft. to the first limb. It is approximately 1200 years old and contains about 6000 cub. ft. of timber (72,000 super. feet). An even larger tree was discovered recently. It has a girth of 55ft., height to the first limb is 38ft., and it contains about 7000 cub. ft. of timber, about 84,000 super. feet. The tree is about 2000 years old and was already a sapling on the first Christmas Day. It was fully developed when the Maoris came to New Zealand, and today it is still growing. It is surely a symbol of permanence. Overshadowed by these trees are countless smaller ones, each of which is bigger than other species to which one is accustomed.

To the traveller with a love of trees a visit to the Waipoua State Forest headquarters is well worth while, for here the men who guard the forest live and work. They are also responsible for the propagation of young kauri stock.

The headquarters are set in a truly beautiful situation with smooth, grassy banks sloping away from the buildings to the sparkling Waipoua River. Across the river is the nursery, and



behind it dominating the scene rises a steep hillside massed with majestic kauris.

In the nursery kauri seedlings thrive like weeds in long punga-framed and manuka-roofed bush houses. Thirty thousand 4- and 5-year-old trees are sent out each year for planting in forest areas and at schools, parks, etc. The kauri seed is obtained from cones which must be picked from the tree before they fall. This involves climbing the tree opossum fashion with hammer-like handspikes and boots with a large steel spike projecting from each toe.

Because it quickly loses its viability the seed, which is collected in early March, must be sown within a month. The seed is sown in an inch of leaf-mould on a bed of decomposed pine needles in frames covered with scrim. Germination takes 6 days and the seedlings are left in the frames with scrim shading until they are a few inches high, when they are planted out into rows, still shaded with scrim. Later they are shifted into the bush houses, from which they go to their permanent positions when about a foot high.

Though the young kauri can stand frost (some are successfully established at Dunedin) complete protection from the wind is absolutely essential. Best results have been obtained by planting along narrow tracks cut in manuka, where the soil is usually suitable and there are some shade and the very necessary wind shelter. Hence the forestry people's intense and very justifiable dislike of the manuka blight which some farmers are spreading as a short cut to their clearing problems. It may prove to be a dangerous short cut when the possibilities of erosion, etc., are considered.

Because the seed is collected from selected trees which are numbered with a copper disc and each batch of seedlings is kept separate under the same number, it is possible to go back to the parent tree from any of the seedlings sent from Waipoua. Thus, as with stock breeding, the better types can be located and bred from and the poorer types can be rejected.

Many rare native trees and some exotics are also propagated in the nursery. Other duties of the forestry officers and workers include the maintenance of an area of *Pinus radiata*,

experimental work with other exotic timber trees, fire watching and fire control (a fire engine is stationed at the headquarters), and the keeping of meteorological records. A radio transmitter in the office is used to send meteorological readings to the Dominion Weather Office. In addition to the usual meteorological instruments there is another way of determining the fire hazard. A special piece of wood is weighed daily on an accurate scale and as the dry weather continues the wood weighs less and less, thus giving the degree of fire hazard.

We may rest assured that though the kauri has almost become a rarity in some places, its safe keeping is in good hands and, if the public plays its part, the future of the tree will be secure.

### The Kauri Gumlands

The one black mark on the kauri's record is the formation of what is known as gumlands. These are areas from which for some reason the kauri vanished in the distant past leaving a poor soil capable of supporting only low, stunted manuka and rushes. To these lands flocked the gum diggers in thousands in search of the deposits of kauri gum, which was in demand for varnish manufacture. Four thousand tons a year were exported in the 1870s and sometimes the trade brought in £600,000 per annum. Though the fields are now almost completely exhausted, the search is still maintained in some isolated areas by the lone digger, who true-to-type will tie his trousers with string below the knee and carry a slender steel spear to probe the ground for gum, a spade to dig it out, and the inevitable sugar bag in which to carry it. He is truly a picturesque but lonely figure.

Unfortunately the diggers left the ground thrown up into huge humps and hollows which, when covered again with the low, stunted manuka and rushes, made the cultivation and farming of the land practically impossible until the advent of the tractor. More recently, the modern tracklaying tractor and super giant discs have been used for this work.

Moreover, farming was discouraged in the past by the fact that soil was extremely poor due to podzolisation by acid from the decaying kauri

leaves. This means that the top layers of the soil were dissolved and carried down sometimes several feet into the ground to be deposited in an unattainable and useless thin layer. Now, however, investigations by the Department of Agriculture and by private farmers have found methods which, in conjunction with modern machinery, can bring this land into high production.

Briefly the system is this:—

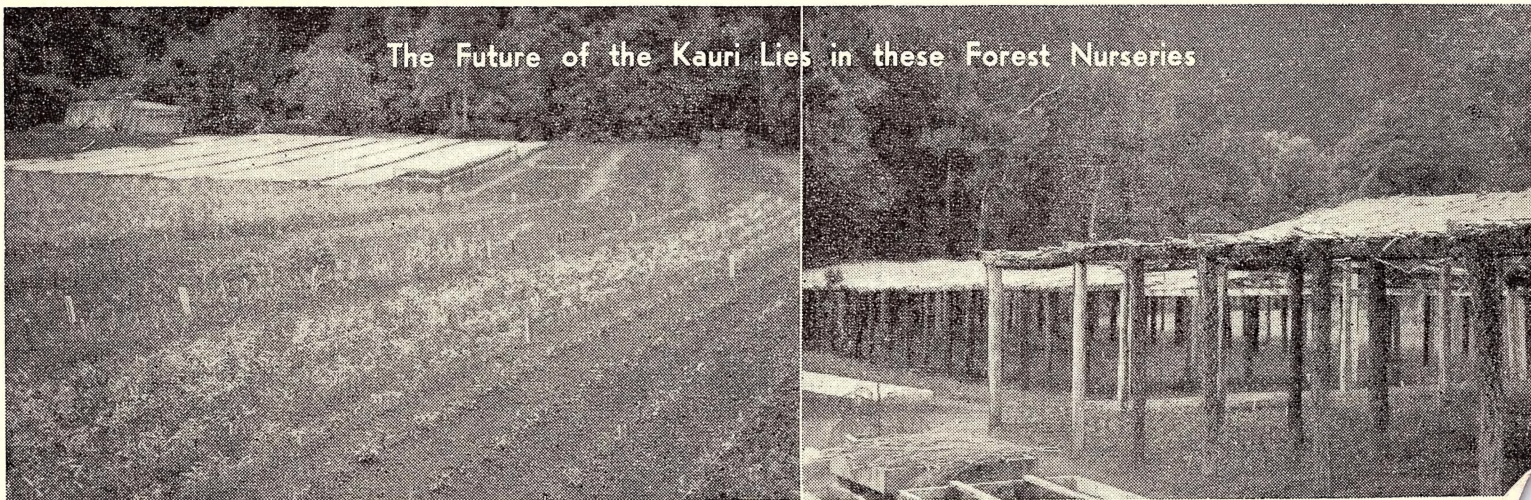
1. Crushing scrub with discs or a roller, leaving it to dry, and then burning.
2. The area is given a double cut with the discs. If the scrub is no more than 4ft. or 5ft. high and super giant discs (30in. blades) are used, crushing and burning are omitted, as the scrub is turned under.
3. After following, preferably for a year, the soil is worked down in the summer months, big discs, tandems, and heavy harrows being used according to the conditions.
4. A dressing of 2 tons of lime per acre is put down and harrowed in.
5. Four hundredweight of superphosphate or slag and 40lb. to 50lb. of grass seed are sown either separately or together and covered, usually in March. If rolling is possible either before or after sowing, it gives better results. First grazing takes place usually about 6 weeks after sowing.
6. As early as possible in spring another dressing of 3cwt. of phosphate is given followed by another dressing in autumn and the normal yearly maintenance dressing thereafter.

The amount of phosphatic manure may seem enormous, but virtually a soil is being built on land almost devoid of plant nutriment. Land treated in this way and carefully grazed is usually capable of carrying about 3 or 4 sheep to the acre during the establishment period. Who knows what level of productivity the land could be raised to in the future?

These are some aspects of the kauri and its effect on the development and economics of our country.

The author acknowledges assistance of officers of the New Zealand Forest Service at Waipoua who gave information so willingly.

The Future of the Kauri Lies in these Forest Nurseries





## Pakistan Government Keeps Buffaloes under Modern Conditions

IN this article Mr. J. F. Till, Instructor in Agriculture, Department of Agriculture, Auckland, who spent a period in Pakistan in 1954 under the Colombo Plan to advise the Government on dairy farming, describes briefly some aspects of milking and milking sheds in Pakistan.

IN parts of Pakistan very large herds of buffalo are kept on Government and military farms. These herds may consist of up to 6000 buffalo and it is interesting to contrast the type of dairy shed, more properly termed a byre, with New Zealand conditions.

A typical shed holds 100 buffaloes and is about 210ft. long, with 50 beasts chained to mangers along each side. In cross section the shed, which is about 35ft. wide, contains the following, beginning from one side: First, a 4ft. feeding race along which stock feed is carried by hand or on small trolleys. Next is the manger, which is about 2ft. 6in. wide and U-shaped in section and

### New Zealand I.F.Y.E. Party Returning

THE four New Zealand Young Farmers who went to the United States of America under the I.F.Y.E. Scheme last year are to return to New Zealand via the United Kingdom. They are S. S. Shirley, Kaitia Club (Far North), D. N. McCallum, Mangatoki Club (South Taranaki), J. Whitelock, Kairanga Club (Manawatu), and L. A. Robertson, West Taieri Club (Dunedin). Reports of their activities in the United States have been received and these will be published in future issues.

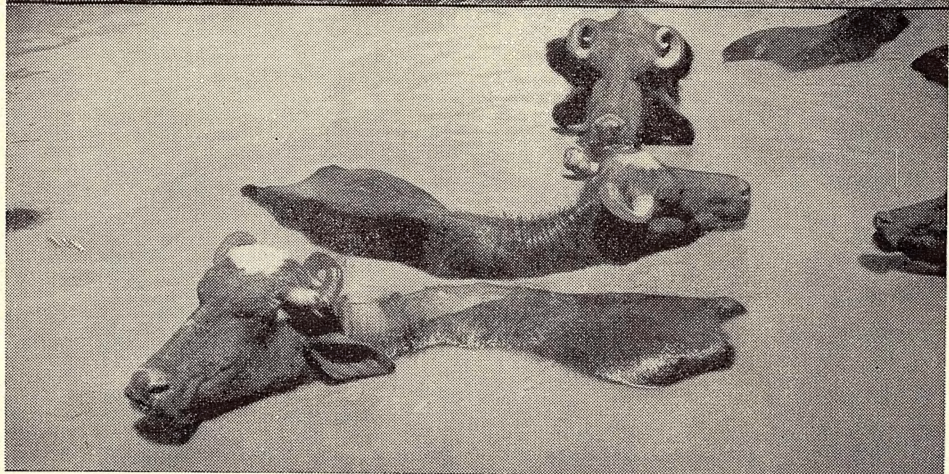
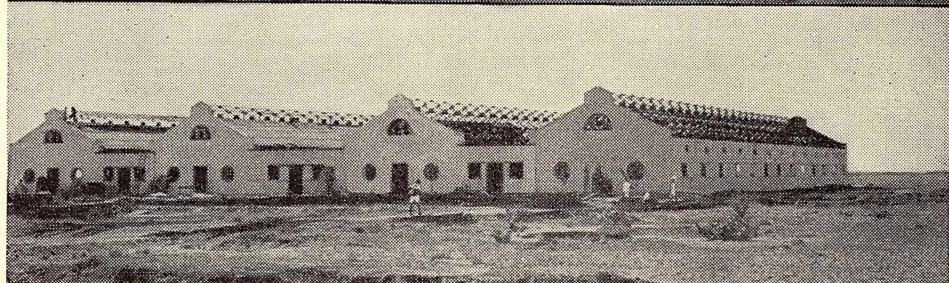
has a back about 3ft. high and a front of 9in. The manger has this very low front so that it may act as a pillow when the animal is lying down. Standing space for the beast comes next. It is about 6ft. long and 4ft. wide. Immediately behind the animal is a drain about 18in. wide and ranging from 1in. in depth at the top end to 6in. or 7in. at the other end. Down the middle of the shed is a 7ft. wide passage. The opposite side of the shed is the same.

### Sheds Grouped

On these large farms the byres are usually grouped. A common design has four byres placed parallel, and this accommodates 400 buffaloes. In between the sheds are holding yards for young stock or for food supplies.

### Milking

During milking the gawala, or milker, milks his beast and carries the milk to the milk room, but he does not enter it. The milk is poured into a tube which leads through the wall into the milk room. Here the milk is received into a bucket mounted on spring scales. When the gawala calls out the



Upper—The interior of a buffalo byre in Pakistan showing from left the feeding race, manger, standing space, drain, central passage, and the same features on the opposite side of the byre. Middle—Four byres built parallel to each other. Lower—Buffaloes in a wallow.

name of the buffalo a recorder notes the milk weight and name.

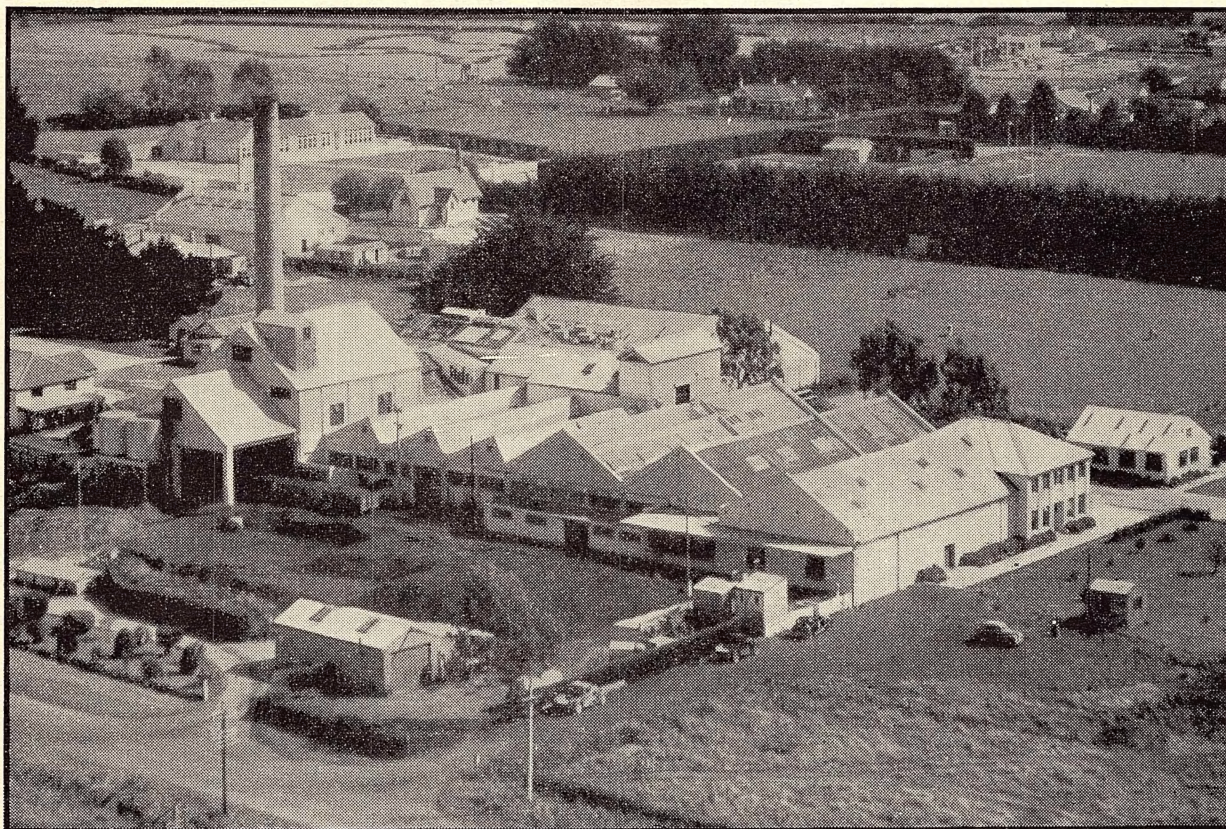
All feed is taken to the animals, which are taken out of the byres only for exercise. With the introduction of modern ideas it is quite likely that crops will be grown for buffalo feed. The buffaloes will then be taken out for grazing during the night in summer, but will be kept inside during the day, when the shade temperatures reach 120 degrees. In winter any grazing will be done in the day, as milk production with the buffalo suffers if the animal becomes cold or wet, as it would on night winter grazing.

### Wallowing

One feature peculiar to the buffalo is that in summer the animals are taken at least once a day to a large concrete tank or pond which is termed a wallow. Here the stock remain for 2 to 3 hours. Though the buffaloes have been bred in this extremely hot climate for many centuries, the beasts — particularly young stock — suffer greatly from heat and a wallow helps to overcome the effects of the excessive heat. Conditions under which buffalo are kept and milked on small holdings are, of course, very different.



# Lactose from Edendale Factory Goes to Many Countries



**A** TRAVELLER in Southland in summer is sure to see a red and cream road tanker, probably branded "Dairy Products Ltd." and loaded with whey, by-product of cheesemaking. The tanker would be travelling to Edendale, about 25 miles north-east of Invercargill, in the fertile Mataura River Valley, where a factory produces lactose or sugar of milk from the whey from 19 cheese factories of eastern and central Southland. In the following article J. R. Styles, Waitane Club (Eastern Southland), tells how the lactose is produced from the raw whey.

**C**HEESE whey is the part of milk remaining after the removal of the curd in the process of cheese making. Disposal of surplus whey had long been a problem, and many methods have been tried, including the dumping of whey into nearby streams, the spreading of whey on pastures, and its use as pig food. Because whey, like milk, rapidly perishes, large quantities of whey soon create a nuisance. The collection of whey from 19 cheese factories in Southland for the preparation of lactose at Edendale has provided one useful avenue of disposal. The main constituents of whey are water, lactose, and mineral salts. The yield of whey varies according to the type of cheese being made, and it was estimated by the United Nations Food and Agriculture Organization that the quantity of whey produced from cheesemaking in the world for 1946-47 was 16,000,000 metric tons, which contained some 750,000 metric tons of lactose.

## Seasonal Activity

For the Edendale factory the tankers collect about 10,000,000 gallons of whey

each season, and they travel about 100,000 miles in doing so. Lactose production is essentially a seasonal activity, which depends on the quantity of whey available. In Southland the season is from September to May. Whey begins to run off at the cheese factories between 9 and 10 a.m., but to allow the lactose factory to begin operations at a reasonable hour, cooled whey is held overnight and is fed into the factory while the tankers are collecting the current day's whey from the collection points.

This is in direct contrast to the procedure during early days of the industry. In 1914 work began at the factory at 8 p.m. and finished at 8 a.m.

## Evaporation of Whey

Processing begins with the evaporation of as much water as possible from the whey. There are cylindrical containers with a honeycomb of vertical pipes near the bottom through which

the whey is forced. Steam surrounds the pipes. For economy the steam is used for several tasks before its heat is dissipated. It is first used to drive the engines in the factory, and then, though cooler, it serves to boil the whey under vacuum. Steam from the boiling whey in the first pan is then used as the sole source of heat in a second pan, and as this steam is much lower in temperature the whey is evaporated under a higher vacuum. Two reasons for evaporation under vacuum are that the available steam is at low pressure, and that too high an evaporation temperature may destroy the milk sugar.

The process of using steam from the boiling whey to heat the whey in the next pan is continued several times in the series, and steam from the final pan is used to preheat whey coming in to the factory. After evaporation the whey occupies only about one-tenth of its original volume.

## The Residue

The residue remaining after evaporation looks like thick porridge, and it is agitated constantly to prevent it from settling into a solid mass. The concentrate is then stored for several days to allow the crystals of lactose to grow. It is then fed into centrifugal hydro extractors, which work like spin driers. In these machines the crystals are separated from the remaining residue or mother liquor in

**HEADING PHOTOGRAPH:** An aerial view of the Edendale sugar of milk factory. Auster Airviews photograph.



## LACTOSE MANUFACTURE . . .

which they are floating. The separated crystals are then washed in water and after drying may be sold as crude lactose. The mother liquor finds a ready sale as a protein-rich stock food.

### Refining Process

At Edendale crude lactose is taken a stage further, the crystals being refined. In this process the crude sugar is dissolved and impurities are absorbed by charcoal or are precipitated into clots. After filtering, the product appears as a clear golden syrupy liquid which is concentrated by evaporation until the crystals re-form into a thick slurry. The crystals are again separated from the liquid in stainless steel hydro extractors and the remaining liquor is drained off.

After further washing the crystals are spin dried until only about 7 or 8 per cent. of moisture remains. They are then fed by a stainless steel screw conveyor to a rotary drier where air at a temperature of 300 degrees F. is introduced to ensure that the finished product is completely sterile. Then the sugar, already very fine, is ground in a fixed hammer mill and the resultant product is screened through silk screens and is packed. Ninety per cent. of the Edendale factory's output is packed in 1cwt. lots and only a very small portion is sold in 1lb. packets.

The processes described require a great volume of water. The Edendale factory uses about 22,000 gallons of water an hour, which is drawn from 45ft. wells.

Steam is derived from coal brought by rail from Ohai, 50 miles away. To lessen the nuisance of flying ash, the dust is separated out from the flue gases and is fed back into the furnace.

### Uses of Lactose

Much refined lactose is used in the manufacture of baby foods. It is also a gentle laxative and is used to give body to certain pills. It mellows sharp-tasting ingredients and a little in the cup takes the "bite" out of cocoa.

During the Second World War it was discovered that lactose greatly increased yields in penicillin manufacture. This stimulated production of lactose, but the market demand still controls output. Whey is always plentiful.

The Edendale factory has had a chequered history. It was begun in 1913 by the New Zealand Sugar of Milk and Casein Company. Whey from 3 or 4 local cheese factories was first carted to the factory in October 1914. Process difficulties and market fluctuations brought the company's fortunes to a low ebb at times.

In 1929 a new company with English interests took over, with Mr. D. F. Sandys Wunsch as managing director. Under his guidance steady technical progress was made and the factory began to prosper. New Zealand now has the lowest-priced domestic supply of lactose in the world. Most of the Dominion's production finds a ready market overseas, and the Edendale product is sold in Australia, South Africa, Hong Kong, Japan, India, and Britain.

## Four Members Chosen for Visit to the United States under the I.F.Y.E. Scheme

THE four members to visit the United States of America this year under the I.F.Y.E. Scheme, sponsored by the New Zealand Dairy Board, have been chosen. They are A. D. J. Morgan, Waiuku Club (Franklin), R. J. Ramsay, Whakarongo Club (Manawatu), D. G. Sadler, Featherston Club (Wairarapa), and E. D. Shaw, Wyndham Club (Western Southland). It is expected that the party will leave New Zealand toward the end of March.

THE selections were made by a committee consisting of Mr. J. S. Hickey, New Zealand Dairy Board (chairman); Mr. A. H. Ward, general manager, New Zealand Dairy Board; Mr. C. W. Burnard, managing director, "New Zealand Dairy Produce Exporter"; Mr. P. S. Green, assistant to the general manager of the New Zealand Dairy Board; Mr. P. Habib, commercial and agricultural attache to the American Embassy, Wellington;

Students' Committee. He was educated at Rangiwahia School, Waiuku District High School, Mt. Albert Grammar School, and Seddon Memorial Technical College, Auckland.

R. J. Ramsay, who is 24 years of age, works on his father's 123-acre dairy and stud sheep farm at Whakarongo, which carries 50 dairy cows and replacements, 100 stud Romney ewes, 65 ram hoggets, 40 ewe hoggets, and 50 Southdown hoggets. Five to 12 acres are used for chou moellier in winter and turnips in summer and no supplementary feed is bought. Ramsay is secretary of his club and is a member of his district committee. He takes a leading part in the affairs of his church, and is also prominent in defence rifle club activities, shooting, fishing, and photographic and amateur radio work. He was educated at Wellington College.

D. G. Sadler is 22 years of age and helps his father with a 130-acre dairy farm at Featherston, of which 40 acres are rich river silt and 90 acres are light shingly soil. It carries 70 Ayrshires and replacements, for which 200 tons of silage are made. Forty acres are shut up in autumn for spring feeding and extensive use is made of the electric fence. Sadler has been a Y.F.C. member for 6 years. He was secretary of his club in 1952, chairman in 1953, vice-chairman in 1954, and a member of his district committee from 1952 to 1954. Miniature and .303 rifle shooting, woodworking, stamp collecting, debating, and part-time cheese factory work are among his leisure time pursuits.

E. D. Shaw is 20 years of age. He has been a Y.F.C. member for 6 years and works with his father on his 300-acre farm at Wyndham, which is on flat river silt. Fifty cows and 780 sheep are run, and 10 acres of hay, 13 acres of swedes, and 5 acres of chou moellier are produced for feed. Shaw has been chairman and treasurer of the Wyndham Club, chairman of the district committee, delegate to the Otago-Southland Council, and a member of the Dominion Executive Committee. His other activities include piano playing, tennis, debating, Rugby football, and singing in the choir. He is a deacon of his church and takes part in the activities of his local drama club.

### Te Pahu Club Flower Show

THE PAHU Club (Waipa) launched out into an uncommon activity for Young Farmers when it initiated a flower show in the local hall. The six sections attracted large entries, and about 150 people visited the show.

—G. M. DUNCANSON, assistant secretary, Te Pahu Club.

### Sharemilking Loans Increased

THE attention of members who are considering applying for financial assistance under the special Y.F.C. 50-50 sharemilking scheme is drawn to the fact that the State Advances Corporation has agreed to an increase in the maximum loan for a one-man herd to £1750 (previously £1500) and to £2500 for a two-man partnership, under the following conditions:—

- Loans not to exceed 75 per cent. of the approved value of the stock and chattels.
- In all other respects the existing conditions of the scheme to apply.

In addition, the Corporation has advised that if a meritorious case comes before a grading committee where an advance slightly higher than the maximum loan now approved seems necessary to enable an applicant to complete a sharemilking agreement, the Corporation's Loans Board may be prepared to consider a moderate increase of the limit if all other factors are satisfactory.

Members in doubt about the proper procedure in applying for assistance under the 50-50 sharemilking scheme should confer with their district secretaries, who have full information on the subject.

Mr. L. J. Wild, Pro-Chancellor of the University of New Zealand; and Mr. S. Freeman, organising secretary of the New Zealand Federation of Young Farmers' Clubs.

A. D. J. Morgan, aged 24 years, works on his father's 86-acre farm at Waiuku, which carries 60 cows and has 13 acres in market garden. He also farms 26 acres on his own account. He was secretary of his club in 1953-54, was a member of his district committee in 1953-54, and is now chairman of his club. His other interests are table tennis, dancing, and music, and he is a member of the Glenbrook Young People's Club and the Waiuku Past



# Details of Short Courses at Canterbury Agricultural College

THE short courses offered by Canterbury Agricultural College, Lincoln, and details of fees and the like are described below. Early application is essential, as the number of students who can be admitted to any course is strictly limited. An application form appears on the back page of this issue and intending students are urged to make use of it immediately.

ALL courses are residential, but those who so wish may register as non-residential students. Hostel fees for short courses are payable on admission and will be £1 a day for the total number of days of the course, with a maximum of £5 for each separate week. The fee for tuition is £1 per week and the Students' Association fee is 2s. 6d. per week. Two blankets are provided by the college. Students should bring any additional blankets required, and sheets, pillowcase, and towel. The college fee of 5s. must be enclosed with the application form.

## The Courses

The courses are open to farmers and Young Farmers who are not less than 18 years of age or who have had at least 2 continuous years' farming experience since leaving school.

### No. 1: Farm Blacksmithing, 9 to 13 May

This course consists entirely of practical work and demonstrations. Syllabus: Construction and operation of the forge; identification of irons and steels; smithy tools and equipment; forging, hardening, and tempering of tools; forging of split links, drawbar pins, shackles, bolts, gate hinges and fastenings, hooks, harrow tines and similar articles; forge welding; re-handling tools; horse shoeing (optional).

Fees: College, 5s.; tuition, £1; materials, £1; Students' Association, 2s. 6d.; board, £5.

### No. 2: Oxy-acetylene Welding, 16 to 20 May

This course is designed for beginners or those contemplating the acquisition of a gas welding plant. The course consists mainly of practical work with some demonstrations. Syllabus: Plant and equipment; welding of sheet metal, bars, pipes, and cast iron; bronze welding of bars, pipes, and cast iron; hard soldering; cutting and hard facing.

Fees: College, 5s.; tuition, £1; materials, £3; Students' Association, 2s. 6d.; board, £5.

### No. 3: Electric Arc Welding, 15 to 19 August

This course is designed for beginners or those contemplating the acquisition of an electric arc welding plant. It consists mainly of practical work with some demonstrations. Syllabus: A.C. welding only of wrought iron, steel, and cast iron; types of joints; building-up; fabrication and hard facing.

Fees: College, 5s.; tuition, £1; materials, £2 10s.; Students' Association, 2s. 6d.; board, £5.

### No. 4: General Farming, 20 to 25 June

Syllabus: The grassland economy of New Zealand; principles of pasture production and conservation; systems

of arable farming; soils and soil testing; soil fertility; lime and fertilisers; plant and animal health; livestock improvement; feeding and management of sheep and cattle; wool faults and their prevention; recent developments in farm machinery; trends in farm management.

Fees: College, 5s.; tuition, £1; Students' Association, 2s. 6d.; board, £5.

## Short Courses at Massey Agricultural College

DETAILS of short courses available at Massey Agricultural College are given below. To meet the popular demand the dates have been advanced, and intending students are urged to apply as early as possible, as each course is limited to 40 students. An application form appears on the last page of this issue.

### Breeding of Sheep and Beef Cattle, 18 to 29 April inclusive

Half of the time will be devoted to livestock and veterinary demonstrations, judging stud Romneys and Southdowns and Aberdeen Angus beef cattle, and visits to various college farms and noted stud properties in the Manawatu district. The rest of the time will be spent on lectures and class discussions bearing on many important aspects of the breeding of sheep and beef cattle.

### Feeding, Management, Diseases, and Parasites of Sheep and Beef Cattle, 30 May to 10 June inclusive

Half the time of the course will be spent on visits to the college sheep farms, well-known farm properties in the Manawatu district, the Grasslands Division of the Department of Scientific and Industrial Research, and Te Awa Hill Country Research Station, and the other half will be devoted to lectures and class discussions bearing on the feeding and management of sheep and beef cattle on flat and hill country, and diseases of sheep and beef cattle. Emphasis will be placed on methods designed to increase productivity.

### Breeding and Feeding of Dairy Cattle, 2 to 13 May inclusive

The course includes study of the improvement of dairy stock through breeding (including artificial insemination), feeding of dairy stock, the prevention and treatment of common diseases of dairy stock, and pastures and crops on the dairy farm.

### Farm Machinery, Fertilisers, and Pastures and Crops for the Dairy Farm, 16 to 27 May inclusive

The course includes study of machinery for cultivation, drainage, irrigation, and harvesting; farm engineering; milking machines; sowing and management of dairy pastures and crops; fertilisers, lime, and trace elements; weed control; and farm trees and hedges.

Applications for enrolment should be made to the registrar, with a deposit of £3, which will be forfeited in the event of an applicant who has

### No. 5: General Farming, 13 to 17 June

This course is open only to farmers from the Westland and Buller districts, and will cover subjects of interest to farmers from those districts, including land development; drainage; soils and fertilisers; pastures; silage; dairying and farm machinery.

Fees: College, 5s.; tuition, £1; Students' Association, 2s. 6d.; board, £5.

### No. 6: General Farming, 4 to 8 July

This course is open only to farmers from the Nelson and Marlborough districts, and will cover general farming subjects, including seed production. It will have special application to the problems of Nelson and Marlborough.

Fees: College, 5s.; tuition, £1; Students' Association, 2s. 6d.; board, £5.

been accepted but has decided not to attend failing to notify the registrar earlier than 1 week before the date of the commencement of a course.

The fees are: Tuition, £3 3s.; college fee, 10s.; board (11 days at 13s. per day), £7 3s.; Students' Association fee, 5s.; contingency fee, £1.

Students can expect to pay 10s. to £1 for stencilled lecture notes, and for certain subjects it is desirable that students should purchase college printed bulletins for use as text books. When buses are used to visit a farm or place of particular interest, each member of the course will be required to pay his share of the hire charge in cash. Students are required to bring their own towels, sheets, and pillowcases. Applications from students under the age of 17 years will not be accepted.

## Maraekakaho Club Shearing Competitions

MARAOKAKAHO Club (Central Hawkes Bay) annual shearing contest was held in Mr. L. Simmons's woolshed, Mangatahi, in fine weather and in the presence of a large crowd of spectators. There was a good muster of competitors, and the sheep were good-cutting, open-woolled Romneys.

MESSRS. G. RANDALL and K. Sandbrook judged the shearing, and a fleeco competition was judged by Messrs. T. Tankersley and J. Sorenson.

Results were:—

Novice class: R. Thomson (82½ points), 1; E. Averill (64), 2.

Learner class: J. R. Renton (164 points), 1; F. Hooper (144), 2; T. Jowsey (143), 3.

Intermediate class: R. Tankersley (95½ points), 1; R. Sharkey (91), 2; R. Elliot (90½), 3.

Open class: D. Berkahn (83 points), 1; P. Berkahn (82½), 2; R. Berkahn (73½), 3.

Fleeco competition: D. Berkahn (98 points), 1; R. Berkahn (95), 2; P. Berkahn (93), 3.

—J. R. RENTON,  
reporter, Maraekakaho Club.



# Waimarama Club Member Works Passage to London

IN October 1949 J. D. Stewart, Waimarama Club (Central Hawkes Bay) and a friend decided to visit England. As their finances were limited, they decided to work their way on shipboard to conserve resources for English and Continental travel. They planned to leave New Zealand in March 1950, but found that chances of a vacancy on an outward bound ship were very few. They managed to secure jobs, however, and in the following story Stewart describes some aspects of their departure and journey.

ONE day at the end of April 1950 we found ourselves on board the m.v. "Brisbane Star" at Napier, talking to the first officer, trying hard to convince him that we were just the two people he needed to fill two vacancies in his crew. The officer consented and the ship had two new junior ordinary seamen. Then we returned home to pack and say hurried farewells to all our friends. Three days later we joined the ship, having passed the customs and obtained tax clearances.

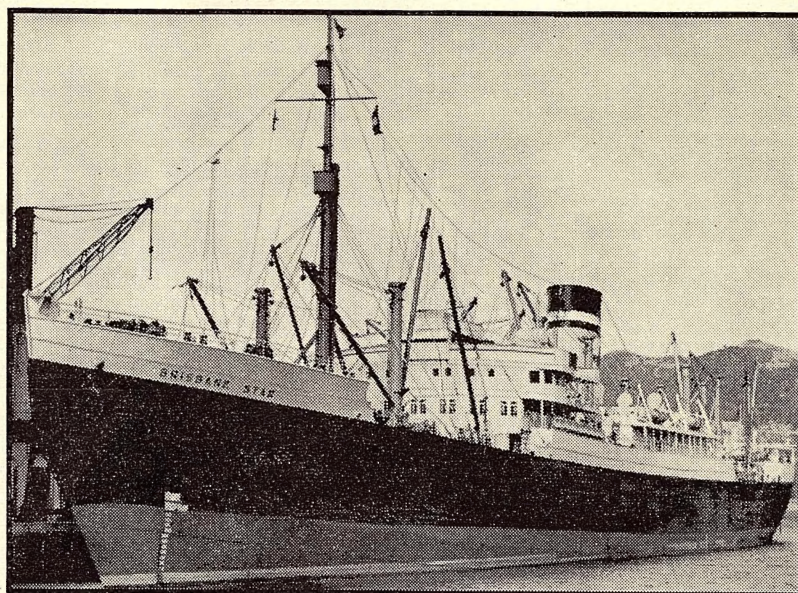
The 11,000-ton refrigerated cargo ship had accommodation for 24 passengers. After drawing our gear from the chief steward, we were shown to a comfortable cabin which had two bunks, a double wardrobe, a chest of drawers, two chairs, a heater, and two portholes. In these days the crew live aft, not in the forecabin. There were 14 seamen in our mess and the greasers had their own mess across the companionway. The crew members came from all parts of the United Kingdom and they were a good crowd of men to live and work with.

Work started at 6.30 a.m., with an hour for each meal and time off for "smokes". Food was plentiful and good; work for the first few days was a bit strange to us and we often found ourselves in the way, but with a little help from everyone the work soon became easy.

## Departure

The day after joining the ship we left for Wellington, where we loaded meat, wool, butter, and apples. After a choppy trip down the coast, we found to our delight that a rolling ship did not make us sick. The ship spent 2 weeks loading and then we closed down the last hatch, cleared away the canvas covers, cleared away the surplus dunnage, and cleaned the ship ready for sea. The great day had come, the Blue Peter was flying, and late in the morning the passengers joined the ship. Then came the order to go to stations. We went on to the forecabin to help the anchor party. Up came the anchor and in came the huge ropes; the vessel was moving slowly away from the wharf and out into the harbour; then slowly the ship began to gather speed. It did not take long to get out to the heads, where we dropped the pilot; soon we set course for Panama at 15 knots.

It took 19 days to reach the Panama Canal and we saw nothing but the albatrosses gliding along behind the ship, waiting for the scraps that were



*["Evening Post"]*  
The 11,000-ton refrigerated cargo-passenger motor vessel Brisbane Star, on which J. D. Stewart, Waimarama Club (Central Hawkes Bay), and a companion worked their way to London. They then made a tour of Britain and the Continent.

put over the side. Then one day they were gone and we ploughed on over a sea as flat as a mill pond. One morning I saw my first flying fish go skimming over the sea.

The work on the trip was mainly painting, and we also washed down the decks every morning. The throb of the propellers just underneath lulled us to sleep at night, but if the engines ever changed speed at night we always woke up. I did not do watches on the wheel—just day work with four others. Work finished for us at the weekend at Saturday midday and we had Sunday off. There was boat drill every Saturday afternoon at 4.30 p.m., when the boats were swung out and everyone paraded wearing lifebelts.

## Panama Canal

Of the Panama Canal we saw little, as the ship passed through at night. The crew did not work the ship in the canal; a party of little brown men from Barbados came aboard and they did all the tying up and letting go of the cables from the "mules" that drag all ships through the canal. We woke to find ourselves in the last set of locks going down to the Atlantic side. After getting out of the canal, that marvel of engineering, a launch came out to pick up the shore crew and to give us our clearance papers. A careless hand dropped the papers into the sea and we saw them floating past us; the launch rushed back and picked them up, and at last they were put on board and we continued our journey.

Two days took the ship to Curacao to take on 1000 tons of fuel oil and more fresh water. Here we had a quick run ashore to see the sights.

## Heavy Weather

The ship ploughed on day after day and the weather started to get cooler, so down came the canvas swimming baths and the seamen put on their warmer clothes and we all wore sea-boots. Our first taste of rough weather came off the Azores, where we ran into the tail end of an Atlantic gale. The ship pitched and rolled and, with the heavy seas running, the decks fore and aft were often awash. Lifelines were rigged for the crew to get around the decks, and the passengers were conspicuous by their absence. One night the deck boy arrived with our supper just ahead of a wave. It appears that he had not closed the door from the after-deck to our quarters and a wave swept down the passage, but little damage was done.

## Arrival

At last we sailed up the English Channel, and the shores of England stood out clearly in the morning sun. It was wonderful to see the white cliffs of Dover and Dover Castle against the green fields of Kent. At the mouth of the Thames we picked up a pilot and began the last leg of a long trip. As we came up the Thames in the early hours of the morning we passed lines of silent ships tied up waiting for the new day so that they could go on loading or discharging cargo. Ships from all parts of the world come to London, the most famous port in the world. And so we berthed next to a sister ship of the line and we were at our journey's end.

Next day we said good-bye to all the crew and were paid off. With us we took papers to say that we were well-behaved on the voyage and had worked well.



## Young Farmers' Duty to the Land and Community

A YOUNG man would derive no worthwhile benefit or pleasure from Y.F.C. membership unless he was prepared to work wholeheartedly for the organisation. Mr. J. Nevin, Dipton, a past chairman of Otago-Southland Council, said this at a leadership conference organised by Central Otago District Committee when speaking of the place of the Young Farmer in the community. He reviewed the history of the Y.F.C. movement in New Zealand, mentioned some of its objects, achievements, and problems, and offered suggestions for the betterment of the movement's work.

MR. NEVIN has been closely associated with the Y.F.C. movement for 18 years. He was an active member for most of that time and as such was well qualified to speak from experience on the value of the organisation to those who supported it energetically. "At times," said Mr. Nevin, "one can be excused for wondering if members really appreciate the blessing they have in the form of a Y.F.C.; at other times one has every reason for confidence. The movement has had its ups and downs, but it has now 21 years of progress behind it."

Mr. Nevin described the early establishment of the movement and referred briefly to the sore blow dealt by the Second World War to the young organisation. It was kept alive by a few keen advisory members and young members and it was with pride, said Mr. Nevin, that he and many others helped with the work of reconstruction when peace came.

### Opportunities Missed

In recounting some of the movement's achievements the speaker reminded members that the movement was primarily one for agricultural education. "Though the way is fully open to us to achieve this aim, I am firmly convinced that because of some imagined difficulty or other, we have not availed ourselves completely of the opportunities presented to us," he said.

On the other hand it was clear that the movement was held in high regard by the community generally, and that it had had some success in its aims of providing members with experience in public speaking, social activity, travel, and in promoting rural welfare.

### Value of Debating

"Only the very short-sighted or persons of great temerity would say that debating is not worth while," said Mr. Nevin. "As one who has been interested in this particular aspect of our work for some years, I would say that it is a constant source of gratification to me to see the improvement in speech and general demeanour of the young men who take part in debating."

Mr. Nevin referred to the value of billeted tours in teaching members how their fellows in other areas lived and worked and in broadening their outlook and agricultural knowledge. The various overseas exchanges could help toward a better understanding between peoples of different countries.

### Value of Publicity

The importance of publicity in fostering the movement was stressed. Mr. Nevin acknowledged the helpfulness of the Press and radio in this respect and queried whether sufficient use was

made of the publicity avenues open to the organisation.

Mr. Nevin deplored the general failure of Young Farmers to give more active support to such groups as Federated Farmers. Members eventually became the senior farmers, and it would be to their advantage to support the producer organisations more before full responsibility in the matter was pushed on to them by passing years.

"The movement has accomplished a great deal," said Mr. Nevin, "but should we be satisfied? The answer is 'no'. We must be aware of the dangers of apathy," said the speaker. He mentioned with disappointment the fact that for several years Y.F.C. membership had remained more or less static just below 10,000. There was ample scope for expansion and throughout New Zealand the movement needed to enrol many new members. It was the responsibility of every member to interest non-members in the movement, for their own and the nation's welfare. Membership could and should be doubled, and enthusiastic work by individuals could accomplish this.

### Need for Care

Mr. Nevin warned of the need for care in promoting expansion. Mushroom growth was always unsatisfactory, and a poor impression was created when clubs were formed and then allowed to go into recess after only a short life. If clubs were to succeed, it was essential to ensure that trained members were ready to take office when the first group of enthusiasts relinquished office. At all too many club annual meetings members not sufficiently groomed for office were bulldozed into executive positions. This, said Mr. Nevin, was one of the chief difficulties hindering the movement's expansion. An inefficiently controlled club would not attract or hold new members. Well-trained club officers were essential. Haphazard appointment of officers was unfair to the movement, the club, the members, and the persons themselves.

### Responsibility Important

"There is a great need for a deeper sense of responsibility in members to their clubs. Becoming a member does not mean that one has nothing more to do. On the contrary it really means that the member has just begun something of vital importance. He should realise that if he works wholeheartedly for his club and fellow members, he will derive great satisfaction from his efforts, will help his fellows, and will build up his own confidence and knowledge," said Mr. Nevin.

Those who already had experience must show an example, and at the same time display a degree of tolerance and understanding to others.

### Farming as a Science

Mr. Nevin stressed that farming today was a science and success depended largely on the acquisition of knowledge. The Y.F.C. movement provided avenues for young men to obtain the necessary knowledge, but there were too many instances of a lack of appreciation of the facilities available through the agricultural colleges, the research stations, and the field advisory officers. To ignore their assistance was to betray a trust to the community. Increased production accompanied by a steady improvement in farm land depended on wise management and wise management grew from informed husbandry.

Economic prosperity would not solve all problems and would not serve to keep young people from tiring of rural life unless the rural communities could offer tangible attractions to counteract the call of the city. "The Y.F.C. movement," said Mr. Nevin, "provides for young people the opportunity to improve their environment by providing better farming and better social and recreational facilities. It is bringing to the forefront young men fitted for leadership who will in future help to instil in others self-reliance and the qualities necessary for progress. Honesty and integrity of character are still qualities to be admired and the Y.F.C. movement is doing its part toward moulding young citizens with these attributes."

"To Y.F.C. members I say this: Be conscientious and efficient; treat others as you wish to be treated yourself; take advantage of the avenues of knowledge open to you; promote better understanding between rural and urban dwellers; bring your movement before the public eye; train your officers well; develop your sense of responsibility; be tolerant of others' shortcomings; guard well your heritage, the land; be loyal to the Queen and the British way of life; avoid narrow-mindedness; think nationally, not parochially; cultivate honesty and self-reliance; and so become the better citizens and better farmers your movement aims to produce."

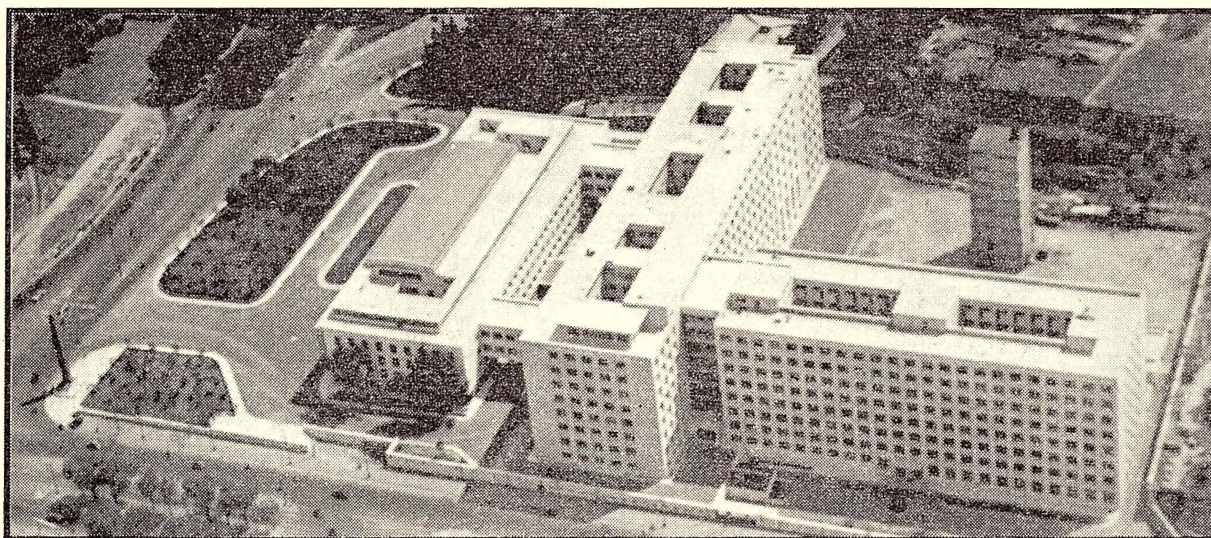
### Milford-Clandeboyne Club Shearing Instruction

MILFORD-CLANDEBOYNE Club (Timaru) members held an instructional field day in conjunction with Federated Farmers at Milford, where Mr. R. Taylor gave instruction in the Bowen method of shearing. Mr. I. A. M. Lange, Sheep and Wool Instructor, Department of Agriculture, Timaru, spoke and demonstrated on the correct method of handling and skirting wool. Twenty-five members and 30 farmers attended.

—G. A. BROWN,  
secretary, Milford-Clandeboyne Club.



## Diverse Study of World's Food Problems



IN a previous article (in the April 1954 issue) the setting up of FAO, its objects, and its administration were discussed. The work done by the organisation is examined in this second article. Briefly, this can be summarised as follows: (1) Maintaining an intelligence service for member Governments and its own staff to be utilised in the section programmes it operates; and (2) framing and developing action programmes to supplement those initiated by Governments and in which FAO, on the request of such Governments, can participate.

THE information collected is of two kinds: Economic and technical. It is, of course, passed on to member countries by means of articles, bulletins, films, radio, and meetings. In these times of rapid progress an efficient information service is important to all Governments.

In the field of action FAO does not act on its own initiative. It can only provide specific advice and help Governments on request and in accordance with the Governments' wishes. The preparation and carrying out of development plans is the responsibility of national Governments, but FAO is able to help in the formulation of such plans and to supply assistance for their implementation.

As was mentioned before, FAO works in divisions, and each division carries out statistical and technical work. In some projects more than one division is involved and this is particularly so in the missions which have been sent to Greece, Poland, Siam, and Nicaragua to advise on development programmes. FAO also co-operates with other organisations working in similar fields.

FAO carries on work both under a regular programme and under the Expanded Programme of Technical Assistance. The regular work is financed from FAO's budget and the latter is paid from a special fund administered by UNO.

A clear picture of the activities of the organisation can be obtained from a study of its publication "The Work of FAO, 1952-53". In its information service FAO has during that period published bulletins and papers and held meetings on the following topics: Livestock breeds, animal nutrition,

animal diseases and parasites; pasture and range management, plant protection, plant breeding, soil classification and improvement, water utilisation, agricultural engineering; farm management, land tenure, co-operatives and agricultural credit, rural industries; the fisheries division publishes its own technical and statistical bulletins and the same applies to forestry. Home economics and nutritional problems are the task of the nutrition division, which works in closely with WHO (World Health Organisation). In its action programme FAO has taken steps through meetings, commissions, and technical aid to combat animal diseases such as rinderpest, foot and mouth disease, and diseases of the zoonoses (i.e., livestock diseases which can be transmitted to man) group. On the recommendation of the 1949 FAO Conference a revised International Plant Protection Convention was formulated. This has become increasingly important because modern transport has greatly increased the risk of diseases and pests being transmitted from infected regions to those previously free. This replaces the obsolete Conventions of 1881 and 1929. The fight against locusts has assumed great importance in the Near and Far East and FAO has helped a great deal in this work by supplying technicians and materials and co-ordinating activities generally.

HEADING PHOTOGRAPH: An aerial view of headquarters of the Food and Agriculture Organization of the United Nations in Rome. The building was the gift of the Italian Government. This photograph is published by courtesy of the Minister for Italy in New Zealand, Dr. Pio Macchi di Cellere.

In the field of plant breeding FAO has rendered great service and in some countries has really fulfilled the aim of making two blades of grass grow where only one grew before.

New Zealanders, with their highly developed and mechanised system of agriculture, often forget that the bulk of the world's farmers are much less fortunately placed. Over-population and lack of knowledge are the main causes of this, and FAO and other organisations are trying to bring up the standard of these people. The Expanded Programme of Technical Assistance has done much in this connection by providing experts and granting fellowships for students from the underdeveloped lands to study in the more advanced countries. It would be very wrong to think that all the experts supplied are Europeans or Americans. Specialists in their fields are drawn from all countries.

It is fully appreciated that countries with advanced systems of agriculture cannot expect to benefit directly from the technical work of FAO. But indirectly there will be a benefit even to these countries, as FAO's aim to raise living standards will lead to expanding markets in the underdeveloped regions and to greater stability. The statistical information published by FAO has, however, been of assistance to all countries and from now on the work of FAO in the economic field will be of great interest to New Zealand. After a time of general food shortages the world is entering once more an era of surplus stocks in some commodities. Dairy products are New Zealand's main concern. FAO's Committee on Commodity Problems, on which New Zealand is represented, in February last year held a working party which discussed ways of best overcoming this threat to normal trade. Any scheme that can be devised to overcome price fluctuations in agricultural products will be of great value to the Dominion.



## News of Junior Farmers' Movement in Queensland

IN a recent letter to headquarters John Wedemeyer, Gayndah Club, Queensland, who toured parts of New Zealand in 1952 as his prize for winning the Australia and New Zealand radio leadership contest at Wellington that year, mentioned several items of interest to those who met John and to those who met Rob. Radel, the Queensland member who was the guest of the federation for several months in 1954. Extracts of John's letter follow.

**"ROB. RADEL** (Coalstoun Lakes Club, adjacent to Gayndah Club) returned home looking fitter than I have ever seen him. Some of his fellow members said he was a living example of the results of New Zealand's pastures and topdressing practices! Rob. covered most of the country I missed and vice versa, so between us we gained a fair idea of the whole Dominion, and many impressions were identical. We agree that New Zealanders are most hospitable, excel in pasture management and stock breeding, and occupy a very beautiful country. Rob. has spoken of his trip at many club meetings—he was at Gayndah Club last August. Recently he toured Gympie Zone (a zone in the Queensland organisation is akin to a Y.F.C. district in New Zealand, but larger in extent), and he made use of my colour slides to make his talks on New Zealand more interesting."

### C.G.C. Visitor

John referred to the visit made to Queensland by Miss Peggie Robinson, a C.G.C. member who was a guest on a cattle station 50 miles from his home. On a Sunday Miss Robinson, her host, and members of the local club joined members of John's and Rob. Radel's clubs for a picnic and citrus orchard inspection at Gayndah. John mentioned the good impression left by Miss Robinson.

### Atherton

"Atherton Tablelands, west of Cairns, is a rich pastoral (dairying) and agricultural (maize and peanuts) area. It is also renowned scenically for its crater lakes, waterfalls, luxuriant tropical jungle, and rain forests. It is a mecca for tourists in winter," wrote John. "The Queensland Junior Farmers' first state conference was held at Atherton last July, when delegates from 60 of the state's 85 clubs were present. Rob. Radel was delegate from his club, and Miss Elizabeth Winkler, who visited New Zealand as a C.G.C. guest in 1954, was present with Miss Peggie Robinson."

John and a friend attended as visitors, having travelled north to Atherton by car via the coastal route. After sightseeing in the north they returned south by the Inland Highway. The 2800-mile trip occupied John and his friend for a fortnight.

### First Constitution

"As a result of the state conference," reported John, "Queensland Junior Farmers now have a constitution modelled in many sections, it would seem, on the New Zealand Federation's Constitution. A state council has been constituted, which consists of:—

- The state organiser, representing the Minister of Education, as secretary-treasurer.
- One active member from each of the 12 zones.

- One active member appointed annually by the state conference (Rob. Radel was appointed at the Atherton meeting).
- One representative each from the Queensland Department of Agriculture and Stock, the Royal National Association of Queensland

## British Sheep Farmers Could Adopt New Zealand Methods with Advantage, says Hegarty

**SPECIAL** sheep yards were seldom built on a farm in Britain and a drafting race was seen only occasionally. In this respect New Zealand yards were superior, states J. H. Hegarty, Gisborne Club, who visited Britain under the United Kingdom Exchange Scheme, in a report on differences in farm practices in the two countries.

**T**HE general scarcity of farm labour in New Zealand with the size of the farms and the large numbers of sheep to be handled, had led to the evolution of labour saving methods. New Zealand's modern yards and races and swim through sheep dips had thus come about.

In Britain, however, labour had always been adequate by Dominion standards, and the need for easily worked yards had not been apparent. Also, on most farms relatively few sheep were carried and so the expense of elaborate yards had not been justified.

When the sheep on a British farm were sorted they were generally put into the courts where cattle were housed in winter. There any sheep wanted out of the flock were pulled out by hand. On nearly every farm the dip was usually one about 12ft. long and 2ft. wide. The sheep were caught, carried to the dip, and dropped in. They were kept swimming while the heads were ducked, and then they climbed out the steps at the far end. Dipping sheep was thus a slow and laborious process.

Mounting labour costs in Britain, in John's opinion, would gradually cause the adoption of at least some of New Zealand's more efficient methods of handling sheep.

### Sheep Branding

"I am not in agreement with the British method of identifying sheep," writes John. "The general way of marking sheep is to brand. Most sheep have earmarks too, but these are age marks not owner's marks. Branding, within reason, is satisfactory, but it appeared to me to be carrying matters a little too far when the owner's brand was a strip across the loins and halfway down the flank, 12in. long and 3in. wide, in addition to a 4in. x 4in. brand with the owner's initials on each shoulder! After such sheep had been rubbing together for a few minutes they reminded me of an example of modern art. Though branding in New Zealand is very bad in some iso-

(Show Society), the combined trading banks, the Rotary Clubs of Queensland, the Rural Section of the Australian Broadcasting Commission, and the Country Women's Association.

"The first meeting of the State Council was held in Brisbane last December, and I attended as delegate from Central and Upper Burnett Zone."

John concluded by conveying seasonal greetings (regrettably late in appearing in print) and best wishes to the many friends he made in New Zealand. He added that he derived great pleasure from regular reading of the "Young Farmer".

lated areas, the excessive use of branding fluids and of pitch or tar is universal in Britain.

"I asked one farmer why he used such big brands on his sheep and he answered that it was necessary to avoid theft from common grazing areas. Then I asked him if he would consider earmarks as good, but his answer was that he knew a sheep stealer once whose earmark was the complete removal of the ear."

## 600 Young Farmers to Visit the United States

**SIX HUNDRED** Young Farmers from Europe, the Middle East, the Far East, and Latin America will visit the United States of America under an arrangement made by the Government and the International Federation of Agricultural Producers. The Young Farmers will each spend 12 months on United States farms. Their fares to and from the United States will be paid either by the Young Farmers themselves, their sponsoring organisations, or their Governments.

## Manawatu District Shearing Contest

**MANAWATU** District Committee annual shearing contest was held in Mr. A. Aker's woolshed, Opiki, when Messrs. G. Allwright, E. Claridge, and R. Bayliss were the judges. During the day Mr. Nesdale, Massey Agricultural College, demonstrated the Bowen technique of shearing, and Mr. Johns, Wellington, demonstrated wool classing. Trophies were presented by T. G. Collis, district chairman.

Results were:—

**Learners' class:** T. Barrow, Opiki Club, 1; J. Capp, Kairanga Club, 2; R. Young, Opiki Club, 3.

**Intermediate class:** T. G. Collis 1, W. Williamson 2, J. Pringle 3, all Kairanga Club.

**Fleeco contest:** J. Pringle, Kairanga Club, 1; G. Storey, Opiki Club, 2; T. G. Collis, Kairanga Club, 3.

**District shearing cup:** Kairanga Club 1, Opiki Club 2.

—G. W. G. SMITH,  
secretary, Opiki Club.



# John Ellman Gave the World the Southdown Sheep



**J**UST over 200 years ago, on 17 October 1753, there was born at Hartfield, Sussex, England, a boy who was destined to have a profound influence on the sheep industry. His name was John Ellman and he became known as Ellman of Glynde. His memorial is the close-woolled Southdown sheep.

**I**N 1780, when Ellman took over the management of the Home Farm of nearly 600 acres from his father, the Southdown breed, though reasonably good by the standards of that day, was very different from the Southdown we know.

The breed was described as "a long legged, slender boned, short wool sheep of the common heath type, light in the shoulder, high at the withers, with a narrow face speckled black and white like that of the Kerry Hill breed of today. In every way it was quite different from the low-set, compact, blocky Southdown sheep of modern times".

The task which Ellman set himself was to improve both the carcass and the wool of this English sheep. This he accomplished by careful breeding and selection. He was one of the first flockmasters to put selected rams to selected ewes, and pen them apart from the rest of the flock. He would put the best 60 ewes to his best ram and save the male lambs as rams for further breeding. He was one of the first breeders to practise flushing the ewes before mating.

## Heavier Fleece

Ellman was very successful with his sheep. When he began operations the average weight of a Southdown fleece was 2lb. to 2½lb. Twenty years later the average fleece of a ram was very nearly 5lb. and a ram teg (yearling) 3lb. 13oz. At the same time the carcass was vastly improved, with an excellent loin, good flavour, and a minimum amount of offal. These improved sheep soon began to make a reputation not only in Sussex, but in many parts of the country. Coke of Holkham, who called in the famous Bakewell to advise him on cattle and sheep, eventually adopted Ellman's improved Southdown breed in place of the Longwools.

Arthur Young, the tireless agricultural reporter of the day, wrote: "Mr.

Ellman's flock of sheep is unquestionably the first in the country. There is nothing that can be compared with it; the wool the finest and the carcass the best proportioned . . . this incomparable farmer has eminently united both these circumstances in his flock at Glynde. He has raised the merit of it by unremitted attention above the rest of the neighbouring farmers, and it now stands unrivalled".

## Wide Interests

Ellman was not a narrow specialist. He began to breed Sussex cattle and they were so good that no others could stand against them when exhibited. He won so frequently that eventually he gave up showing to give others a chance. His all-round farming was so outstanding that in 1819 he was awarded a medal by the Board of Agriculture for the best cultivated farm in Sussex.

He undertook extensive draining operations around the town of Lewes. He was a founder member of the Smithfield Show. The construction of the harbour at Newhaven and the development of river navigation were among his interests. If that were not enough, he made vigorous and sustained efforts to improve the conditions of the farm worker. He was also an enthusiastic beagler and cricketer in his youth.

Though he became a deputy lieutenant of the county, he refused in turn a baronetcy and a peerage that could have made him Earl of Glynde.

He was honoured many times. In 1800 a silver cup was presented to him by 27 landowners and farmers in

appreciation of his efforts for farming. In 1805 the Duke of Bedford gave him a silver vase. In 1829 he received a great silver tureen surmounted by the figure of a Southdown sheep. It was described as "a tribute to his great merit, especially in improving and extending throughout the British Empire the breed of Southdown, and his much admired conduct to his labourers".

John Ellman retired in 1829 when he was 77. He died on 22 November 1832. This epitaph was written for him:—

*"By him the breed of South Down was first improved, and through his exertions spread over the whole kingdom."*

[Adapted from an article by D. H. Robinson in "The Farmers Weekly".]

## Cheviot Club Visits Christchurch

**E**IGHTEEN members of Cheviot Club (North Canterbury) visited Christchurch area for a day. First visit was to the Railways Department Workshops, Addington, where 1½ hours proved all too short to see all phases of work carried out. The tarpaulin making, machinery, welding, blacksmithing, and woodworking shops were most interesting.

The party then moved on to Sir R. Heaton Rhodes's property at Taitapu, where the manager, Mr. M. Fleming, gave instructive talks on the Corriedale and English Leicester flocks and the Red Poll herd. Later the beautiful "Otahuna" gardens were visited.

—R. G. ABBOTT,  
secretary, Cheviot Club.

## Hawera Club Calf Competition

**M**EMBERS of Hawera Club (South Taranaki) who were interested in the club's calf competition toured six farms to watch the judging, which was done by Mr. W. Phillips, senior advisory member.

The result was:—  
B. Barkla (52 points), 1; D. P. Kelly (51), 2; C. Washer (46), 3.

—J. D. McCALLUM,  
secretary, Hawera Club.

**HEADING PHOTOGRAPHS:** Left, the modern Southdown sheep of Britain. Right, a 2-shear ram bred by Ellman and exhibited in 1798. This is one of the earliest known illustrations of a Southdown, showing the original heath breed with speckled face.



## The Welsh Hill-country Farmer is an Individualist

**I**N a report on his 6 weeks' stay in Wales under the United Kingdom Exchange Scheme, A. E. Malcolm, Enfield Club (North Otago), says that he found the Welsh hill country farmer individualistic, independent, thrifty, and hospitable. Lex thought that he preferred to be his own boss, even if that entailed a low standard of living. Most of Wales was rugged, and there were severe winters. Two-thirds of the country was over 500ft. above sea level; more than a quarter exceeded 1000ft. Part of Lex's report follows.

**T**HERE is, nevertheless, some very good farming country in Wales, and in Monmouthshire, in the south-east, where I began my Welsh visit, I was struck by the very intensive nature of the farming. The average size of the holdings in this country is only 40 acres. By diversifying their farming as much as possible, most of the smallholders can make quite a good living. Dairying predominates, but the keeping of poultry, pigs, and sometimes a few ewes, with the growing of cereal and fodder crops, is typical of the more intensively farmed areas of Wales. Many of these small holdings are farmed as family units, that is, all the work is done by the family. This tends to minimise production costs, but it has obvious disadvantages.

### Attractive Countryside

Monmouthshire will remain in my memory as a very attractive county. In the valleys of the Wye and the Usk and on the easy rolling country all the small fields are surrounded by hedges, and in places there are extensive woods. Altogether the countryside is most attractive. The woods and hedgerows can be a liability, as they harbour rabbits and foxes which in some areas are quite a problem, and in some places the smallness of the fields creates management problems. I was rather amazed when I was told that on a farm of 400 acres which had originally been four smaller holdings there were no less than 90 fields. In New Zealand, where perhaps we go to the other extreme, we could better utilise our land by further subdivision and I think that in many places we should make a greater effort in planting shelter belts.

### Radnorshire

In Radnorshire, Central Wales, the picture is completely different. The county is mainly very rugged and broken, though in the valleys there is some good farming land. This county is typical of the Welsh hill-country. Many of the hills are bare and rocky, and others are covered in bracken and grasses of variable nutritive value; there is very little heather. The winters are wild, cold, and wet, and I did not think the summer was much better. The Welsh native sheep are very small, active, and hardy, and Welsh lamb enjoys a great reputation for quality. A Welsh ewe is doing well if it can produce 3lb. of wool full of kemp and consequently of little value. On the harder country the lambing percentages are in the vicinity of 70 to 80 per cent. Other breeds of sheep native to this part of the country are the Clun Forest and the Kerry Hill. The Cluns are black

faced, and the wool seems to have a lot of black spots. It is a very popular sheep in England, and at the annual sheep sales many of this breed cross the border into England.

The Kerry Hill sheep I liked better. These sheep are bred on high country and seem very hardy. In conformation of carcass they are similar to the Romney, and on good country they will grow into really big sheep. When crossed with a fat lamb sire on good country they prove to be very prolific breeders. The Kerrys have quite a good fleece, clipping up to 8lb. or 9lb. of wool, though again the wool is full of kemp. Though they have no scientific backing for the theory, many British hill country breeders maintain that kemp in the wool denotes hardiness in the sheep. At Llanbadarn Fynydd, near the Montgomeryshire border, I stayed on a farm of 300 acres of enclosed land, the owner of which had access to common grazing nearby. This farm was 1500ft. above sea level and was fairly rugged. Only the tops and valleys were in pasture and the balance was covered in bracken. Three hundred Welsh ewes, 25 Hereford breeding cows, and the same number of yearlings were carried. In addition, some oats and turnips were grown, and some hay was conserved for the winter. I would think that this holding is better than the average hill country holding in Wales.

### Small Margins

Just how close to the bread and butter line many of these hill country farmers are I did not realise until I had an opportunity of seeing some of their costings. I have no hesitation in coming to the conclusion that if it were not for the subsidies that these farmers get for stock and for ploughing up old pasture, they could not hope to carry on under existing conditions. Under the Hill Farming and Livestock Rearing Act some progress is being made in renovating farm homes and buildings and in establishing pastures on virgin country to increase production from this all-essential breeding country, but it is costing a great deal. Under supervision of county agricultural executive committees much worthwhile work has been accomplished in breaking in bracken country, but a great deal remains to be done. During the war the war agricultural executive committees broke in a considerable acreage of hitherto undeveloped country and quite good cereal crops were grown. Now this country is carrying reasonably good pasture and a considerable quantity of stock. Right alongside this improved country, however, it is not unusual to find thousands of acres of

derelict land. I cannot understand why no concerted effort is being made to do something with this land.

### Advisory Services

While in Wales I had the opportunity of having a look over the National Agricultural Advisory Services' (N.A.A.S.) Centre for Wales, at Trawscoed. The N.A.A.S. finds its counterpart in New Zealand in the Department of Agriculture. In each county throughout England and Wales, working under the direction of the chief agricultural executive officer, who is also administrative officer for the county agricultural executive committee, is a team of advisory officers. At Trawscoed a considerable amount of research is being undertaken in dairying, soil testing, and crop experimental work. On the farm itself experimental work is going on in crossing the Welsh sheep with the Border Leicester, and crop experimental work is also being undertaken, as well as work on pigs and dairy cattle.

A visit to Wales would not have been complete without a visit to the Plant Breeding Station at Aberystwyth, and there I spent a few hours having a look at some of the experimental work being carried out. It is with the Aberystwyth strains of grasses and clovers that our New Zealand small seeds have to compete on the British market. It was therefore gratifying to see that in experimental plots New Zealand perennial ryegrass compared favourably under varying conditions with the best Aberystwyth strains. However, from what I saw of short-rotation ryegrass (H.1) growing in various plots, my earlier impressions were confirmed that this grass, which grows so well under North Island conditions in New Zealand, is not suited to the harder conditions encountered in most parts of Britain. Aberystwyth S100 white clover I thought was no better than New Zealand Certified white clover, but I do think that the Aberystwyth strains of cocksfoot, timothy, and meadow fescue are very good indeed.

Special purpose pastures seem to be the order of the day in Britain at the moment, and I think that the meadow fescue-timothy mixture might do well in the heavier rainfall districts in New Zealand, provided suitable management was followed.

### Clubs Combine for Ploughing

**G**ORDONTON and Horsham Downs Clubs (Waikato) members combined for a ploughing instruction field day at Gordonton, where Mr. J. R. Murray, Instructor in Agriculture, Hamilton, demonstrated and spoke on the theory of good ploughing. Other speakers were Mr. W. Barry, Newton King Ltd., and a representative of an implement concern.

Individual instruction was given to 10 members. Everyone learned a great deal and the day proved most successful. Fifteen Gordonton members, 12 Horsham Downs members, and 15 farmers attended.



# Club Meetings

THE following are brief reports of recent club meetings. In the table are shown the districts of the Y.F.C. federation, each with its number of active clubs in the left-hand column, and in the right-hand column the number of clubs which sent reports of meetings to headquarters between 9 December and 10 January.

In these reports the membership of the club is given in parentheses after the attendance figures.

To appear in the April issue of the "Young Farmer" reports must reach headquarters by 11 March.

Western Southland	..	..	16	3
Eastern Southland	..	..	13	Nil
South Otago	..	..	11	6
Central Otago	..	..	7	Nil
Dunedin	..	..	6	1
North Otago	..	..	6	1
Waimate	..	..	7	2
Timaru	..	..	12	6
Mid-Canterbury	..	..	9	6
Christchurch	..	..	14	2
North Canterbury	..	..	8	3
Marlborough	..	..	7	1
Nelson	..	..	9	1
West Coast	..	..	2	Nil
Horowhenua	..	..	4	4
Wairarapa	..	..	8	4
Southern Hawkes Bay	..	..	8	3
Central Hawkes Bay	..	..	14	Nil
Northern Hawkes Bay	..	..	3	5
Gisborne-East Coast	..	..	8	2
Manawatu	..	..	10	5
Oroua	..	..		

## WESTERN SOUTHLAND

Hokonui—Mr. C. D. Denize, Instructor in Agriculture, Invercargill, spoke on the work of the Extension Division of the Department of Agriculture. Present 20 (28).

Limehills—Mr. C. D. Denize spoke on soils and manures. Present 7 (27).

Nightcaps—Mr. J. D. Clouston, farmer, Otautau, spoke on his recent visit to the United Kingdom. Present 14 (37).

## SOUTH OTAGO

Clutha Valley—Films on farming shown. Present 14 (22).

Kaitangata—Representatives of L. D. Fisher and Co. Ltd., Auckland, and Reid and Gray Ltd., Balclutha, spoke on silage making and showed films. Present 30 (40).

Lawrence—Mr. T. Burnside, chairman, Meat and Wool Section of Federated Farmers, Otago, spoke on the constitution of Federated Farmers. Present 18 (41).

Milton—Mr. H. Lowery, Lovells Flat, spoke on the coal mining industry. Present 31 (41).

Owaka—Police Constable E. Myers, Owaka, spoke on firearms and on his tour of Australia. Present 19 (27).

## DUNEDIN

Palmerston—Messrs. A. G. Gardner and Gray, of Reid and Gray Ltd., spoke on ploughs and overhead spray irrigation. Present 9 (21).

## NORTH OTAGO

Five Forks—Mr. W. R. Lobb, Instructor in Agriculture, Oamaru, spoke on pastures and pasture establishment. Present 12 (30).

## WAIMATE

Arno—Three meetings. Mr. H. B. L. Johnstone, local farmer, spoke on sheep breeding. Present 7 (17). Mr. J. L. Symons, Fields Instructor, Waimate, spoke on pasture management and mixtures. Present 8. Mr. M. D. Studholme, local farmer, spoke on sheep management. Present 10.

Hook—Three meetings. Mr. W. A. R. Miller, Seed Certification Assistant, Waimate, spoke on seed certification. Present 11 (20). Mr. C. J. Crosbie, Farm Machinery Instructor, Christchurch, spoke on farm safety and showed films. Present 12. Mr. A. Grant, local farmer, spoke on animal breeding, artificial breeding, and his recent visit to England. Present 10.

Waihaorunga—Three meetings. Mr. C. J. Crosbie spoke on farm safety and showed films. Present 17 (18). Mr. A. Grant spoke on

Wanganui	..	..	10	6
South Taranaki	..	..	7	2
Central Taranaki	..	..	5	1
North Taranaki	..	..	11	4
Central King Country	..	..	4	1
Northern King Country	..	..	7	Nil
Eastern Bay of Plenty	..	..	9	4
Western Bay of Plenty	..	..	12	4
Rotorua	..	..	13	2
Matamata	..	..	10	6
Waipa	..	..	10	6
Waikato	..	..	13	Nil
Hauraki	..	..	5	2
Franklin	..	..	11	2
Auckland Central	..	..	11	1
Waitemata	..	..	6	4
Redney	..	..	5	1
Whangarei	..	..	5	Nil
Kaikohu	..	..	4	2
Northern Wairoa	..	..	5	3
Far North	..	..	4	

animal breeding. Present 14. Club's 21st anniversary programme approved. Present 7.

## TIMARU

Lyafieldale—Three meetings. Mr. E. Murman, Dutch settler, spoke on his homeland. Present 21 (22). Mary Hoffman, I.F.Y.E. visitor, showed slides and spoke on her home state of Illinois. Present 18. Messrs. D. Rowe, K. Payne, and S. Lister spoke on their recent tour of Australia. Present 21.

Pleasant Point—Mr. D. Shears, local grocer, showed films on helicopters. Present 11 (35).

## MID-CANTERBURY

Hinds—Mr. C. P. Whatman, Instructor in Agriculture, Ashburton, spoke on light land farming. Present 30 (75).

Lauriston—J. Love and K. Latimer spoke on the work of district's Land Settlement Committee. Present 20 (33).

Mayfield—Messrs. W. H. Way and K. Armour, National Mutual Life Association, spoke on life insurance. Present 20 (44).

Tinwald—Discussion panel. Present 21 (33).

## NORTH CANTERBURY

Oxford—Combined meeting with C.G.C. Miss P. Robinson, C.G.C. member, spoke on her tour of Queensland. Present 14 (29).

Rangiora—Mr. B. W. Smythe, Adult Education Tutor-organiser, spoke on adult education. Present 18 (28).

## MARLBOROUGH

Blenheim—Wilbur C. Tomlinson, I.F.Y.E. visitor, spoke of his home, Ohio, United States of America. Present 20 (71).

Flaxbourne—Quiz session and social evening. Present 8 (25).

Linkwater—Formation meeting. Officers elected: Chairman, T. D. Looms; vice-chairman, N. Thompson; secretary, E. Jenkins; treasurer, A. Coleman; senior advisory member, Mr. W. Hawthorne. Initial membership 11.

## NELSON

Murchison—Discussion on Y.F.C. matters with district secretary. Present 19 (45).

## HOROWHENUA

Levin—Two meetings. Mr. N. E. Downey, Veterinarian, Department of Agriculture, Levin, spoke on stock diseases. Present 11 (27). Mr. J. M. Hopkins, Instructor in Agriculture, Levin, gave a lantern lecture on clovers. Present 12.

## WAIRARAPA

Carterton—Mr. J. B. Swan, Veterinarian, Department of Agriculture, spoke on the test-

ing of bulls for fertility and infertility in cows and sheep. Present 20 (37).

Greytown—Mr. W. B. H. Smith, Fields Instructor, Masterton, showed films. Present 10 (20).

Martinborough—Mr. W. B. H. Smith showed films. R. P. Williams, district chairman, spoke on the aims and objects of the Y.F.C. movement. Present 12 (35).

Nireaha—Two meetings. Mr. W. B. H. Smith showed films. Present 13 (26). Mr. V. T. Spalding, veterinarian, Eketahuna, and Mr. A. Chapple, artificial insemination technician, spoke on artificial insemination. Present 15 (26).

## SOUTHERN HAWKES BAY

Maungamutu—Mr. M. Powell, Pahiatua, spoke on firearms. Present 10 (37).

Norsewood—Mr. A. V. Lithgow, Officer-in-charge, and two assistants from Seed-testing Station, Department of Agriculture, Palmerston North, gave a demonstration on germination, purity, and strain testing of various pasture seeds. Present 10 (22).

Woodville—Mr. N. Hunt, Wright, Stephenson and Co. Ltd., showed films. Present 23 (38).

## CENTRAL HAWKES BAY

Omakere—Mr. G. Aitken spoke on his trip overseas. Present 12 (26).

Tikokino—A representative of Ivon Watkins Ltd. spoke and showed films on weed control. Present 12 (28).

## GISBORNE-EAST COAST

Gisborne—Brains trust; panel comprised Messrs. J. E. V. Simpson, D. McFarlane (veterinarian), J. R. Beckett, jun., and H. de O. Chamberlain (Instructor in Agriculture, Gisborne). Present 26 (46).

Manutuke—John Hegarty gave a lantern lecture on his trip to Britain under the United Kingdom Exchange Scheme. Present 9 (32).

Otoko—Mr. M. H. Blunt, veterinarian, Gisborne, spoke on fertility in beef cattle. Present 8 (23).

Rere—Mr. D. McFarlane, veterinarian, Gisborne, gave a lantern lecture on deaths in lambs. Present 10 (20).

Waerenga-o-kuri—One new member. John Hegarty gave a lantern lecture on his visit to the United Kingdom. Present 15 (27).

## MANAWATU

Fitzherbert West—Mr. Young, Bagnall and Keeble, sharebrokers, Palmerston North, spoke on the stock exchange. Present 8 (20).

Kairanga—Mr. B. A. J. Smith, Fields Instructor, Palmerston North, gave a lantern lecture on clovers. Present 19 (46).

## OROUA

Apiti—Mr. B. Devine, Hodder and Tolley Ltd., Feilding, spoke on pastures and cropping. Present 11 (26).

Bunnythorpe—Mr. E. G. Rose, Instructor in Agriculture, Palmerston North, spoke on pumice land development. Present 9 (18).

Feilding—Mr. T. O. Walshe, New Zealand Meat and Wool Boards' Economic Service, spoke on the functions of the boards and problems associated with the sale of New Zealand's produce overseas. Present 20 (33).

Halcombe—Mr. E. Blackmore, local garage proprietor, spoke on car and tractor maintenance. Present 28 (36).

Rangiwahia—Mr. F. Desborough, Manawatu Aerial Topdressing Co. Ltd., Feilding, spoke on the various types of aircraft now engaged in aerial topdressing. Present 20 (25).

## WANGANUI

Hunterville—Mr. A. A. Duncan, Instructor in Agriculture, Wanganui, spoke on fertilisers and trace elements. Present 10 (52).

Makirikiri-Okoia—Members combined with local C.G.C. for lecture and demonstration by members of the St. John Ambulance Association. Present 17 (39).

Mangamahū—Two meetings. Messrs. W. Glenn and F. Currie spoke on fat stock buying and meat grading respectively. Present 12 (18). Mr. J. McMaster, Wanganui Machinery Exchange, spoke on farm machinery maintenance. Mr. Andrews, Palmerston North, showed films. Present 10.



**Raetihi**—Mr. W. R. Eaton, Livestock Instructor, Raetihi, spoke on facts and fallacies about livestock. Present 6 (23).

**Taihape**—Two meetings. Two new members. Mr. T. G. Boyd, Bank of New Zealand, spoke on banking. Present 18 (47). One new member. Mr. W. H. August, Livestock Instructor, Taihape, spoke on diseases in sheep and cattle. Present 15.

**Westmere**—Three meetings. Mr. J. V. McFarlane, land valuer, spoke on land valuation. Present 22 (80). Mr. D. W. Tolchard, Traffic Officer, spoke on road safety. Present 25. Mr. J. A. Brasell, Machinery Instructor, Palmerston North, spoke on tractor safety. Present 22 and 4 visitors.

#### SOUTH TARANAKI

**Eltham**—Mr. H. Drabble spoke on electrical faults. Present 27 (32).

**Hawera**—F. Jackson gave a lantern lecture on his visit to the United States of America under the I.F.Y.E. Scheme. Present 16 (42).

#### CENTRAL TARANAKI

**Toko**—Mr. K. Pegg, auctioneer, spoke on sale procedure and the preparation of stock for sale. Present 15 (32).

#### NORTH TARANAKI

**Inglewood**—Mr. C. Marsh spoke on his overseas trip. Present 34 (37).

**Tarata-Pukeho**—Mr. J. D. Brasell, Machinery Instructor, Palmerston North, gave a lantern lecture on tractor safety. Ray Reuble, I.F.Y.E. visitor, and B. Mooney, district chairman, spoke on Y.F.C. exchange schemes and other matters. Present 13 (24).

#### EASTERN BAY OF PLENTY

**Awakeri**—Mr. S. W. Rees, supervisor, Bay of Plenty District Pig Council, gave a lantern lecture on the management of sows and litters and showed films on overseas farming. Present 19 (30).

**Taneatua**—Two meetings. Mr. J. F. Southcombe, consulting officer, New Zealand Dairy Board, spoke on farm management. Present 11 (25). Oratory contest; leading speakers were I. F. MacPherson and D. R. Herdman. Present 13.

**Thornton**—Brabant Brothers, tractor agents, Whakatane, showed films. Present 10 (16).

**Waimana**—Mr. P. G. Davenport, veterinarian, Waimana, spoke on the Veterinary Services Council and calf rearing. Present 10 (15).

#### WESTERN BAY OF PLENTY

**Pukehina**—Mr. S. W. Rees, supervisor, Bay of Plenty District Pig Council, gave a lantern lecture on the feeding and management of pigs. Present 22 (39).

**Te Puke**—Quiz. Chairman and senior advisory member were questionmasters. Present 22 (42).

**Waihi**—Mr. J. J. Howard, veterinarian, Waihi, spoke on general livestock management. Present 11 (26).

**Welcome Bay**—Mr. H. A. Prew, Horticultural Instructor, Tauranga, spoke on the management of a home orchard. Present 9 (14).

#### ROTORUA

**Ngakuru**—Mr. C. R. Taylor, Fields Instructor, Rotorua, spoke on pasture management and spring cropping. Present 19 (22).

#### MATAMATA

**Ngarua**—Michael Garrett spoke on his United Kingdom Exchange Scheme tour of New Zealand. Present 24 (41).

**Putaruru**—Mr. B. R. Thomson, veterinarian, Tokoroa, spoke on agricultural conditions in Rhodesia. Present 24 (55).

#### WAIPI

**Kakepuku**—Two meetings. One new member. Mr. J. Collier, veterinarian, Te Awamutu, spoke on ailments of dairy cattle. Present 23 (28). Mr. D. F. Scott, Machinery Instructor, Auckland, gave a lantern lecture on tractor safety. Present 20.

**Ngutunui-Tiheroa**—Mr. J. McQueen gave a lantern lecture on dairy cattle breeding. Present 15 (30).

**Ohaupo**—Two meetings. Mr. R. B. Gordon, Instructor in Agriculture, Te Awamutu, spoke on silage making. Present 19 (25). Interna-

tional Harvester Co. of New Zealand Ltd. showed films. Present 23.

**Roto-o-rangi**—Mr. Atkins, Karapiro hydro-electric power station, spoke on present and future stations on the Waikato. Present 14 (32).

**Wharepapa South**—Oxford debate for John Bayly Cup. Present 15 (33).

#### HAURAKI

**Hikutaia**—Mr. G. L. Banfield, Instructor in Agriculture, Thames, gave a lantern lecture on farm cultivation. Present 17 (24).

#### FRANKLIN

**Patumahoe**—Two meetings. Films on the identification and certification of grass seeds were shown by the Department of Agriculture. Present 12 (30). Films shown by Para Rubber Co. Ltd. Present 12.

**Waikuku**—Two meetings. Para Rubber Co. Ltd. showed films. Present 15 (22). Debated, "That a farmer should have only enough land to form an economic unit". Present 15.

#### AUCKLAND CENTRAL

**Karaka**—Mr. A. Bettany, county engineer, Franklin, spoke on county affairs. Present 22 (37).

**Mangere**—Mr. H. Woodyear-Smith, Challenge Phosphate Co. Ltd., showed films and spoke on grassland management. Present 11 (15).

**Manurewa**—Mr. G. A. Durham, Veterinarian, Department of Agriculture, Auckland, lectured on veterinary science. Present 28 (38).

**Upper Franklin**—Two meetings. Mr. Blomfield, secretary, Auckland District Small Bore Rifle Clubs' Association, spoke on the organisation of a miniature rifle club. Present 15 (20). Mr. J. E. Till, Instructor in Agriculture, Auckland, gave a lantern lecture on his visit to Pakistan.

## Excerpts from District Committee Minutes

**HAURAKI**—J. E. Quinn reported on successful machinery demonstration. G. Townshend to compile history of the district. Present 13.

**MATAMATA**—Request to be sent to clubs for a volunteer to make a rural broadcast. Secondary schools in the district are to be approached re the formation of school clubs. Report given on machinery demonstration. Recommended that yearly visits be made to Ruakura. Decided to take out an annual insurance policy for £5000 to cover all Y.F.C. functions in the district. Present 15.

**WANGANUI**—Reports of activities received from Hunterville, Mangamahū, Makirikiri-Okoia, Ohakune, Taihape, and Westmere Clubs. Reports received on tractor safety day at Ohakune, shearing and fat lamb competition, council shearing competition, and ploughing match. Local C.G.C.s to be invited to take part in stock judging competitions. Report received on council meeting. Clubs requested to furnish radio talks. Decided to forward to the Marton A. and P. Association special prizes for the Y.F.C. fat lamb competition. A. L. Skilton, with the help of other members, offered to arrange a suitable Y.F.C. exhibit at the Marton and Taihape Shows. Sub-committee set up to go into printing of programme booklet. Present 15.

**OROUA**—Sub-committee to arrange ploughing match. Reports received on district and council shearing competitions, council meeting, and overseas visitors. Selection panel appointed for Queensland visit. Clubs urged to furnish programmes early. Colyton Club to arrange district stock judging competitions. Decided to hold a picnic in February and a leadership evening in April. Distribution of "Young Farmer" discussed. Present 18.

**MANAWATU**—Reports received on Dominion Executive Committee and council meetings. Selection committee appointed for Queensland visit and radio leadership contest. Reports received on district and council shearing contests. Sub-committee to arrange printing of programme booklet. Sub-committee to go into pointings for efficiency contest. Rongotea Club arranging district stock judging competition; chairman, secretary, and N. Wilson were appointed to this committee. Present 14.

**HOROWHENUA**—Mr. C. E. C. Webb to visit Horowhenua College Club to urge members to

#### WAIEMATA

**Waimauku**—Mr. A. McKissock, Horticultural Instructor, Auckland, spoke on the establishment and management of a home orchard. Present 14 (31).

#### RODNEY

**Hakaru**—General forum on farm topics. Present 8 (30).

**Warkworth**—General discussion on club policy. Present 20 (37).

**Wellsford**—Two meetings. Mr. Torrance gave a lantern lecture on aerial topdressing. Present 19 (30). Messrs. Shepherd and James gave a lantern lecture on the laying of plastic piping. Present 13.

#### WHANGAREI

**Maungatapere**—Two meetings. Mary Hoffman, I.F.Y.E. visitor, gave a lantern lecture on life in Illinois. Present 8 (10). Mr. C. E. Ballinger, Instructor in Agriculture, Whangarei, spoke on pasture improvement. Present 10.

#### NORTHERN Wairoa

**Aropohue - Turiwiri**—Discussion on club matters. Present 9 (20).

**Ruawai**—Mr. Gibson, chemist, Ruawai Dairy Company, spoke on the bacteriological testing of whole milk and skimmed milk powders; he also dealt with his other duties as a dairy chemist. Present 8 (11).

#### FAR NORTH

**Kaitia**—Mr. A. Langman spoke on aerial topdressing. Present 10 (24).

**Umawera**—Mr. J. A. Burton, consulting officer, New Zealand Dairy Board, spoke and showed films on pastures. Present 12 (17).

**Waiharara**—Mr. J. A. Smith, Livestock Instructor, Kaitia, gave a lantern lecture on hydatids. Present 6 (16).

join local clubs on leaving school. Mr. D. Barclay offered to visit St. Patrick's College, Silverstream, to urge members from rural areas to join clubs and to investigate possibility of forming a club at the college. Decided to institute a club efficiency competition. Present 8.

**MID-CANTERBURY**—Decided to purchase suitable bell for debates. Chairman and vice-chairman visited school clubs before the end of 1954. Mayfield Club to run district stock judging competition. Reports received on last council meeting, district pasture judging competition, and the South Island debate final. Decided to print programme booklets this year and to invite local C.G.C.s to participate. Messrs. G. J. Pullar, Dominion vice-president, and S. Freeman, organising secretary, spoke on Y.F.C. affairs. Congratulations sent to Eifflon C.G.C. on winning district debating competition. Present 28.

**SOUTH OTAGO**—Printing of a 40-page programme booklet discussed; decided to approach commercial firms for advertisements. Decided to invite Wairarapa and Auckland Central District touring parties to visit during first 2 weeks of June. Decided to arrange a visit to Canterbury Agricultural College. Report received on district leadership evening. Milton Club to erect winter show bay. Billets arranged for overseas visitors. Report received on council meeting. Clinton Club congratulated on reaching national debating final. Decided to conduct a junior debating competition this year. Committee of 5 set up to compile history of Y.F.C. in district. Decided to accept a donation of £10 for a dog class at the district stock judging. Remit, "That inter-council and inter-island debates be held in neutral areas", was carried. Present 40.

**WESTERN SOUTHLAND**—Decided to hold the district stock judging competitions on 9 March. Woodlands, Seaward Downs, and Wyndham Clubs to arrange bay at Dunedin Winter Show. Decided that if Nelson were unable to accept invitation to tour this area during winter, Marlborough be invited. Arrangements made for visit from South Taranaki. Report received on visit to Invermay Research Station. District chairman and secretary to visit all clubs. Present 29.



## APPLICATION FORM—MASSEY COLLEGE

The Registrar,  
Massey Agricultural College,  
Palmerston North.

I wish to apply for admission to the following short course  
(or courses) in 1955 as a residential student. (Strike out words  
which do not apply.)

Full name.....  
(Block letters)

Address.....  
(Block letters)

Title of course (or courses).....  
(As in programme\*)

.....  
.....

Age..... Club.....

I enclose a deposit of £3 (three pounds) for each course  
applied for.

During my attendance at the college I agree to abide by the  
rules of the college.

Signature.....

Date.....

## APPLICATION FORM—LINCOLN COLLEGE

The Registrar,  
Lincoln College,  
Christchurch.

I wish to apply for admission to the following short course  
(or courses) in 1955 as a residential student (non-residential  
student). (Strike out words which do not apply.)

Full name.....  
(Block letters)

Address.....  
(Block letters)

Number of course (or numbers).....  
(As in programme\*)

Title of course (or courses).....  
(As in programme\*)

.....  
.....

Age..... Club.....

I enclose college fee of 5s. (five shillings) for each course  
applied for.

During my attendance at the college I agree to abide by the  
rules of the college.

Signature.....

Date.....